

REMARKS

Claims 1-20 are pending in the present application. The Office Action mailed April 19, 2005 ("the Office Action"), objected to claims 3, 7 and 16 and rejected claims 1-20.

Noted Informalities

The Office Action objected to claims 3, 7 and 16 for noted informalities. Applicant has amended claim 3 as suggested in the Office Action.

With respect to claims 7 and 16, Applicant respectfully requests that the Examiner reconsider whether the phrase "configured to" does not constitute "a limitation in any patentable sense". Applicant respectfully submits that the phrase "configured to" is a well-known and widely accepted phrase used in every day practice before the U.S. Patent and Trademark Office. Furthermore, the phrase "configured to" is in no way ambiguous or indefinite.

Applicant respectfully requests that the Examiner, in a subsequent official communication, provide a citation to the M.P.E.P. and to case law which supports the allegation that the particular phrase "configured to" "does not constitute a limitation in any patentable sense" as set forth in the Office Action.

Claims 1-8, 10-13, 16, 17, 19 and 20

Claims 1-8, 10-13, 16, 17, 19 and 20 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,704,346 B1 ("Mansfield") in view of U.S. Patent No. 6,553,078 B1 ("Akerberg"). Applicant respectfully traverses the rejection as set forth below.

Applicant respectfully submits that Mansfield was improperly combined with Akerberg for the reasons as set forth below.

Under the heading "The Proposed Modification Cannot Render the Prior Art Unsatisfactory for its Intended Purpose", M.P.E.P. § 2143.01 states that "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification" (citing *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1126 (Fed. Cir. 1984)).

Mansfield states its intended purpose as objects of the invention in the Summary of the Invention section as set forth below.

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A further object of the invention is to provide an improved BT scheme which does not violate any of the requirements of the BT specification.

Another object of the invention is to provide a BT transceiver which is operable with legacy BT devices which do not employ this scheme.

Mansfield at col. 3, lines 48-54. As FIGS. 3 and 4A-C demonstrate, the Bluetooth (BT) specification requires alternate transmitting and receiving. As the specification of the present application explained, “[u]nder normal BT operating conditions, master device 102 waits until the first slave device finishes transmitting the first packet before beginning to transmit the next packet”. Specification of the present application at page 12, lines 18-20.

Thus, the proposed modification of Mansfield to allegedly meet, for example, the following elements as set forth in claim 1 - “receiving a first packet ... wherein said second packet is transmitted ... prior to the end of said first packet” - would violate the BT specification which would be contrary to Mansfield’s intended purpose.

The conclusion under M.P.E.P. § 2143.01 is that “there is no suggestion or motivation to make the proposed modification”. Accordingly, since Mansfield cannot be modified as alleged in the Office Action, the obviousness rejection cannot be maintained.

It is therefore respectfully requested that the obviousness rejection based on the modification of Mansfield (e.g., Mansfield in view of Akerberg) be withdrawn with respect to claim 1 and its dependent claims (i.e., claims 2 and 3).

Since independent claims 4, 7 and 16 recite the same or similar language, thereby requiring a modification of Mansfield contrary to Mansfield’s intended purpose, Applicant respectfully makes the same or similar arguments, if appropriate, with respect to independent claims 4, 7 and 16.

It is therefore respectfully requested that the obviousness rejection based on the modification of Mansfield (e.g., Mansfield in view of Akerberg) be withdrawn with respect to independent claims 4, 7 and 16 and their dependent claims (i.e., claims 5, 6, 8, 10-13, 17, 19 and 20).

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M.P.E.P. § 2145(X)(D)(1) states that “[a] prior art reference that ‘teaches away’ from the claimed invention is a significant factor to be considered in determining obviousness” (citing *In re Gurley*, 27 F. 3d 551, 554, 31 U.S.P.Q.2d 1130, 1132 (Fed. Cir. 1994)).

Applicant respectfully submits that Mansfield, in the above-reproduced text, teaches that its systems and methods not violate any of the requirements of the BT specification and the BT transceiver be operable with legacy BT devices. It is a “significant factor” that Mansfield “teaches away” from the claimed inventions in so much as transmitting a second packet prior to the end of a first packet, or similar language as discussed above, violates the requirements of the BT specification and makes such systems and methods inoperable with legacy BT devices which do follow the requirements of the BT specification.

It is therefore respectfully requested that the obviousness rejection based on a prior art reference (i.e., Mansfield) that teaches away from the claimed inventions (see, e.g., claims 1-8, 10-13, 16, 17, 19 and 20) be withdrawn with respect to claims 1-8, 10-13, 16, 17, 19 and 20.

M.P.E.P. § 2145 (X)(D)(2) states that “[i]t is improper to combine references where the references teach away from their combination” (citing *In re Grasselli*, 713 F. 2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983)).

As already mentioned above, Mansfield teaches away from its modification in view of Akerberg since its systems and methods cannot violate any of the requirements of the BT specification and its BT transceiver must be operable with legacy BT devices. Akerberg allegedly teaches a modification, as discussed above, which is contrary to the requirements of the BT specification and the operability with legacy BT devices.

In addition, Akerberg, itself teaches away from such modification. The Office Action cites FIG. 3 of Akerberg and the accompanying text at col. 3, lines 29-46 of Akerberg in support of the modification of Mansfield. However, two paragraphs later, Akerberg disparages the example illustrated by FIG. 3 of Akerberg.

In such a modified system it would be possible to implement both downlink and uplink antenna switching diversity, since the base station would no longer transmit and receive simultaneously.

Akerberg at col. 3, lines 64-67.

Thus, in order to achieve downlink and uplink antenna switching diversity, Akerberg actually abandons the example illustrated by FIG. 3 of Akerberg. (See, e.g., col. 1, lines 45-47 of Akerberg (“[i]t is also an object of the present invention to provide a TDMA-TDD/FDD radio communication system with both downlink and uplink antenna switching diversity”)). Thus, in order for Akerberg to provide both downlink and uplink antenna switching diversity, Akerberg must teach away from transmitting and receiving simultaneously. Thus, Akerberg teaches away from the very elements in FIG. 3 of Akerberg that the Office Action proposes make up for the teaching deficiencies of Mansfield.

In summary, Applicant respectfully submits that, not only does Mansfield teach away from Akerberg and Akerberg teach away from Mansfield, but Akerberg teaches away from the alleged teaching deficiencies of Mansfield. For at least the above reasons, it is respectfully requested that the obviousness rejection based on the improper combination of Mansfield in view of Akerberg be withdrawn with respect to claims 1-8, 10-13, 16, 17, 19 and 20.

Claims 9 and 18

Claims 9 and 18 stand rejected under 35 U.S.C. § 103(a) as being obvious over Mansfield in view of Akerberg and further in view of U.S. Patent No. 6,834,192 B1 (“Watanabe”). Applicant respectfully traverses the rejection as set forth below.

The arguments made above with respect to claims 1-8, 10-13, 16, 17, 19 and 20 are also made with respect to claims 9 and 18 since the obviousness rejection is also based, at least in part, on Mansfield in view of Akerberg.

It is therefore respectfully requested that the obviousness rejection based, at least in part, on Mansfield in view of Akerberg be withdrawn with respect to claims 9 and 18.

Claim 15

Claim 15 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Mansfield. Applicant respectfully traverses the rejection as set forth below.

Claim 15 recites, in part,

(b) receiving a first portion of a packet from a secondary device in a first time slot at a first communication frequency; and

- (c) during a second time slot,
transmitting a packet using the communication frequency
associated with said second time slot in the definition of the duplex
communication channel, and
receiving a second portion of said packet from said
secondary device at said first communication frequency.

Mansfield does not describe at least these elements as set forth in claim 15. The Office Action states that FIG. 4a shows an example of the recited elements, however, this is incorrect. As alleged in the Office Action, the master or slave must transmit and receive during the same time slot. FIG. 4a does not support this interpretation. The master in FIG. 4a is not transmitting and receiving in a particular time slot. The slave in FIG. 4a is not transmitting and receiving in a particular time slot. Furthermore, the master in FIG. 4a is not transmitting using a communication frequency associated with that time slot and also receiving in that time slot using a communication frequency associated with another time slot. The slave in FIG. 4a is not transmitting using a communication frequency associated with that time slot and also receiving in that time slot using a communication frequency associated with another time slot.

For at least the above reasons, Mansfield does not describe each and every element as set forth in claim 15. It is therefore respectfully requested that the anticipation rejection based on Mansfield be withdrawn with respect to claim 15.

Claim 14

Claim 14 stands rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,650,630 B1 ("Haartsen"). Applicant respectfully traverses the rejection as set forth below.

To maintain an anticipation rejection, each and every element as set forth in claim 14 must be described in Haartsen. In the Office Action, components in FIG. 10b of Haartsen were cited. With regard to "detecting a first portion of a multi-slot packet in a first time slot" as set forth in claim 14, the Office Action states that the multi-slot pack being detected is packet 3D. However, according to FIG. 10b, packet 3D is being transmitted by RAD2 to remote unit D. If packet 3D is being transmitted by RAD2, then Applicant seeks a clarification as to how packet 3D is being detected in satisfaction of the elements as set forth in claim 14.

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For at least the above reasons, it is respectfully requested that the anticipation rejection based on Haartsen be withdrawn with respect to claim 14.

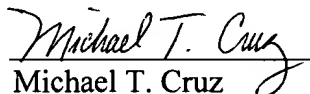
Conclusion

In view of at least the foregoing, it is respectfully submitted that the pending claims 1-20 are in condition for allowance. If anything remains in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the below-listed telephone number.

The Commissioner is hereby authorized to charge additional fees or credit overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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Respectfully submitted,



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